

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Y. Tanabe, et al.

Application No.: Rule 53(b) of No. 10/355,301

Filing Date: April 12, 2004

For: FABRICATION PROCESS OF A SEMICONDUCTOR INTEGRATED  
CIRCUIT DEVICE

Expected  
Group: 2814

Expected  
Examiner: G. PERALTA

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR § 1.97 AND § 1.98**

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

April 12, 2004

Sir:

Pursuant to Applicants' duty of disclosure, enclosed please find a List, on a form substantially equivalent to Form PTO-1449, of documents cited in connection with prior applications of the above-identified application, that is, Application No. 09/086,568, filed May 29, 1998, Application No. 09/773,000, filed January 31, 2001, Application No. 10/013,454, filed December 13, 2001, and Application No. 10/355,301, filed January 31, 2003.

Since Application No. 09/086,568, Application No. 09/773,000, Application No. 10/013,454 and Application No. 10/355,301 are being relied upon under 35 USC § 120 in the above-identified application, copies of the listed documents are not enclosed. See 37 CFR § 1.98(d).

This Information Disclosure Statement is being submitted concurrently with the filing of the above-identified application. Accordingly, requirements of 37 CFR § 1.97(b) are satisfied.

Moreover, pursuant to Applicants' duty of disclosure, Applicants respectfully note the following list of patent documents, pertaining to catalytic oxidation:

- (1) U.S. Patent Application No. 09/494,036, filed January 21, 2000 (which is a Continuation application of prior Application No. 09/380,646, filed September 7, 1999, now U.S. Patent No. 6,239,041, issued May 29, 2001), now U.S. Patent No. 6,518,201, issued February 11, 2003 (gate insulating film formation);
- (2) U.S. Patent No. 6,066,508, issued May 23, 2000 (exhaust gas treatment);
- (3) U.S. Patent Application No. 09/551,551, filed April 18, 2000 (a Continuation application of the application issuing as U.S. Patent No. 6,066,508 (exhaust gas treatment), now U.S. Patent No. 6,319,860, issued November 20, 2001;
- (4) U.S. Patent Application No. 09/314,956, filed May 20, 1999 (dual gate selective oxidation), now U.S. Patent No. 6,323,115, issued November 27, 2001; and
- (5) U.S. Patent Application No. 09/635,270, filed August 9, 2000, now U.S. Patent No. 6,593,229, issued July 15, 2003.

Also to be considered in connection with catalytic oxidation are Japanese Laid-Open Patent Document No. 9-172011, a copy of which was submitted in Application No. 09/773,000 on January 31, 2001, together with a full English translation thereof, and WO 97/28085, a copy of which was also submitted in Application No. 09/773,000 on January 31, 2001, together with a full English translation thereof and Abstract

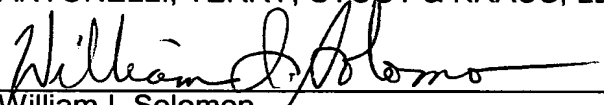
thereof, each listed on the enclosed Form PTO-1449 (equivalent).

In view of the foregoing, it is respectfully submitted that all applicable requirements of 37 CFR § 1.97 and § 1.98 have been satisfied, in connection with all of the documents on the enclosed List. Accordingly, consideration of the listed documents, and other pertinent documents referred to in the foregoing, upon examination of the above-identified application, are respectfully requested.

Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (referencing docket no. 501.36269CC5), and please credit any excess fees to such deposit account.

Respectfully submitted,

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<b>Form PTO-1449</b>  <b>U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use several sheets if necessary)	<b>ATTY. DKT. NO.</b>  501.36269CC5	<b>APPLICATION NO.</b>  TBD
	<b>APPLICANT</b> Y. Tanabe, et al.	
	<b>FILING DATE</b>  April 12, 2004	<b>EXPECTED GROUP</b>  2814

**U.S. PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date
AA	2001/0042344	11/22/2001	Ohmi, et al.			
AB	5,840,368	11/24/1998	Ohmi			
AC	6,362,086	3/26/2002	Weimer, et al.			
AD	6,162,741	12/19/2000	Akasaka, et al.			

**FOREIGN PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation/ Abstracts	
						Yes	No
AE	61-127124	6/14/1986	Japan			X	
AF	61-152076	7/10/1986	Japan			X	
AG	61-267365	11/26/1986	Japan			X	
AH	1-94657	4/13/1989	Japan			X	
AI	6-333918	12/2/1994	Japan			X	
AJ	6-115903	4/26/1994	Japan			X	
AK	6-163517	6/10/1994	Japan			X	
AL	5-152282	6/18/1993	Japan			X	

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

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<b>Examiner</b>	<b>Date Considered</b>

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard St.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

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AA	5,341,016	8/23/1994	Prall, et al.			
AB	4,282,270	8/4/1981	Nozaki, et al.			
AC	5,387,540	2/7/1995	Poon, et al.			
AD	6,197,702	3/16/01	Tanabe, et al.			

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Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation/ Abstracts	
						Yes	No
AE	59-132136	7/30/1984	Japan			X	
AF	7-94716	4/7/1995	Japan			X	
AG	3-119763	5/22/1991	Japan			X	
AH	7-235542	9/5/1995	Japan				
AI	8-264531	10/11/1996	Japan				
AJ	WO 97/2808	8/7/1997	WO			X	
AK	9-172011	6/30/1997	Japan			X	
AL							

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AE	56-107552	8/26/1981	Japan			X	
AF	58-4924	1/12/1983	Japan			X	
AG	59-10271	1/19/1984	Japan			X	
AH	60-734	1/5/1985	Japan			X	
AI	60-72229	4/24/1985	Japan			X	
AJ	60-123060	7/1/1985	Japan			X	
AK	60-147136	8/3/1985	Japan			X	
AL	61-127123	6/14/1986	Japan			X	

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

AM	Kou NAKAMURA, et al., "Hydrogen-Radical Balanced Steam Oxidation Technology for Ultra-Thin Oxide with High Reliability", The Electrochemical Society of Japan, Electronic Materials Committee, Proceedings of the 45 <sup>th</sup> Symposium on Semiconductors and Integrated Circuits Technology, Tokyo, December 1 and 2, 1993, pages 128-133		
AN	Tanabe, et al., "Diluted Wet Oxidation" A Novel Technique for Ultra Thin Gate Oxide Formation (Oct. 1997)		
AO			
<table border="1"> <tr> <td><b>Examiner</b></td> <td><b>Date Considered</b></td> </tr> </table>		<b>Examiner</b>	<b>Date Considered</b>
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AB	6,602,808	8/2003	Tanabe, et al.			
AC	6,518,201	2/2003	Tanabe, et al.			
AD	6,596,650	7/2003	Tanabe, et al.			
AE	6,569,780	5/2003	Tanabe, et al.			
AF	6,417,114	7/2002	Tanabe, et al.			
AG	6,518,202	2/2003	Tanabe, et al.			
AH	6,528,431	3/2003	Tanabe, et al.			

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